# Requirements Related to Stormwater Management for PCBs

Preliminary Draft "Fact Sheet"

## I. Introduction

The Washington Department of Ecology (Ecology) is working on reissuing the Phase I, Western and Eastern Washington Phase II Municipal Stormwater Permits (Permits). Ecology has prepared preliminary draft sections of Permit language and is accepting informal comments on these sections until **11:59 p.m.** on **December 2, 2022. Send your comments to:** https://wq.ecology.commentinput.com/?id=T3iSC.

Or mail hard copies to:

Municipal Stormwater Comments
WA Department of Ecology
Water Quality Program
PO Box 47696
Olympia, WA 98504-7696

## II. Proposal

In spring 2022, Ecology announced that we are considering adding requirements to the permits related to stormwater management for polychlorinated biphenyls (PCBs) in building materials. PCBs are a group of 209 man-made compounds that generally occur as complex mixtures. PCBs are very persistent, lasting for decades in the environment. Like other persistent, bioaccumulative, and toxic chemicals, PCBs move easily between air, water, and land. They are found throughout Washington. PCBs also accumulate in people and animals, becoming more concentrated in organisms at the top of the food chain, like orcas.

PCBs were produced for commercial uses from about 1929 until the 1976 Toxic Substances Control Act banned the chemicals for most uses in 1979 and restricted PCB concentrations in products to low levels. PCBs were used mostly in heat transfer fluids in electrical transformers and capacitors, but also as plasticizers, wax and pesticide extenders, and lubricants. PCBs were added to building caulk at high levels - up to about 30% by volume - to enhance the flexibility and longevity of seals. Buildings and structures built or renovated between 1929 and 1979 and particularly the highest usage period of 1950 to 1979, may contain PCBs, mainly in:

- Door and window caulking.
- Paint (primarily exterior paint).

- Galbestos roofing and siding.
- Fluorescent light ballasts.
- Various forms of joint material and sealants.

Ecology has been working to identify and address PCBs in the environment for several years. Ecology's 2015 PCB Chemical Action Plan (CAP) recommended we develop and promote best management practices (BMPs) to control PCBs in building materials to reduce exposure to people and prevent PCBs entering stormwater. PCBs in building materials can contaminate stormwater runoff or enter the MS4 through precipitation and pressure washing of buildings, as well as construction debris during demolition or redevelopment – activities that are regulated under the Municipal Stormwater Permits to require stormwater management BMPs.

In 2021, US EPA developed PCBs in Building Materials fact sheet to provide guidance for handling PCB containing materials. Ecology also developed its own guidance, aligned with EPA's guidance.[1]

In association with this proposed update and in anticipation of Ecology's guidance on PCBs in building materials, updates are proposed to several BMPs in the Stormwater Management Manuals – specifically the following BMPs:

- S424 BMPs for roof/building drains
- S431 BMPs for washing buildings
- S438 BMPs for construction demolition
- S451 BMPs for building repair/remodeling

The relevant available guidance, as well as Ecology's priority to address PCBs in the environment, provide opportunity for the Permits to better address activities to avoid or reduce PCBs from entering and discharging from MS4s. We propose to update several sections of the Stormwater Management Program (SWMP) to better address PCBs with stormwater management activities in the following ways:

1. Education and Outreach – For the target audiences of engineers, contractors, developers, and land use planners, add a subject related to proper handling of materials to reduce pollution to stormwater, including PCBs. This subject area for general awareness education to this particular audience will promote the proper handling of building materials during activities that could transport PCBs into stormwater or the MS4.

[1] Washington State Department of Ecology. 2022. How to Find and Address PCBs in Building Materials. Publication 22-04-024. https://apps.ecology.wa.gov/publications/SummaryPages/2204024.html

2. Illicit Discharge Detection and Elimination (IDDE) – Addresses the conditionally allowable discharge of external building washdown of buildings built during time period most likely to contain PCB containing materials (i.e., buildings constructed between 1950-1980).
3. Operation and Maintenance – Develop policies, procedures, and practices for:
    a. External building washdown of municipally owned buildings constructed during the time period most likely to contain PCB containing materials (i.e., buildings constructed between 1950-1980).
    b. Proper handling of building materials during demolition and renovations of municipally owned buildings.

# III. What are the proposed Permit changes?

***The proposed Permit edits and approach*** are proposed below for informal comment. This is an excerpt of proposed Permit language for consideration. Ecology may propose additional changes to the following permit sections in the formal draft, expected to be released for public comment in 2023.

## A. Education & Outreach

### PH I S5.C.11.a. & WWA PH II S5.C.2.a. Permit excerpts

i. ***General awareness***: To build general awareness, Permittees shall target the following audiences and subject areas:

(a) *Target Audiences*: General Public (including school age children and overburdened communities), and businesses (including home-based and mobile business)

Subject areas:

- General impacts of stormwater on surface waters, including impacts from impervious surfaces and of the hazards associated with illicit discharges and improper disposal of waste.
- LID principles and LID BMPs.

(b) *Target audiences*: Engineers, contractors, developers, and land use planners.

*Subject areas*:

- Technical standards for stormwater site and erosion control plans.

- LID principles and LID BMPs.
- Stormwater treatment and flow control BMPs/facilities.
- Proper handling of materials to reduce pollution to stormwater, including PCBs in building materials.

(c) Permittees shall provide subject area information to the target audience on an ongoing or strategic schedule.

### EWA PH II E&O S5.B.1.a.iii Permit excerpts

iii. *Target audiences*: Engineers, construction contractors, developers, development review staff, and land use planners.

Provide information about:

(a) Technical standards, and the development of stormwater site plans and erosion control plans.

(b) Infiltration and underground injection control criteria.

(c) Low Impact Development (LID).

(d) Stormwater Best Management Practices (BMPs) for reducing adverse impacts from stormwater runoff from development sites.

(e) Municipal stormwater code requirements.

(f) Proper handling of materials to reduce pollution to stormwater, including PCBs in building materials.

## B. IDDE - Conditionally Allowable Discharges

### Ph I S5.C.9.b.ii.; WWA PH II S5.C.; EWA PH II S5.B.3.b.iii Permit excerpts

(d) Street and sidewalk wash water and water used to control dust~~, and routine external building washdown~~ that does not use detergents. The Permittee shall reduce these discharges through, at a minimum, public education activities (see S5.C.11) and/or water conservation efforts. To avoid washing pollutants into the MS4, Permittees shall minimize the amount of street wash and dust control water used.

(e) Routine external building washdown that does not use detergents for buildings built before 1950 and after 1980. The Permittee shall reduce these discharges through, at a minimum, public education activities (see S5.C.11) and/or water conservation efforts. To avoid washing pollutants into the MS4, Permittees shall minimize the amount of wash water used.

For buildings built between 1950-1980, routine external building washdown (without detergents) may be conditionally allowable when following pollution prevention plan guidance to address pollution from building materials that may enter the storm systems, e.g. PCB-containing building materials.

(f) Other non-stormwater discharges shall be in compliance with the requirements of a pollution prevention plan reviewed by the Permittee which addresses control of such discharges.

## C. Operations & Maintenance – O&M Plan

### PH I S5.C.10.e.; WWA PH II S5.C.7.d Permit excerpts

e. Implement practices, policies, and procedures to reduce stormwater impacts associated with runoff from all lands owned or maintained by the Permittee, and road maintenance activities under the functional control of the Permittee. No later than December 31, 2027, document the practices, policies, and procedures. Lands owned or maintained by the Permittee include, but are not limited to: parking lots, streets, roads, highways, buildings, parks, open space, road right-of-way, maintenance yards, and stormwater treatment and flow control BMPs/facilities.

The following activities shall be addressed:

*Add to the existing list the following provisions*

xv. Building exterior cleaning and maintenance, including proper management of washdown water from buildings built between 1950-1980 and buildings with PCB-containing materials that will come into contact with washwater.

xvi. Proper handling of building materials and implementing other source controls to prevent PCBs from entering stormwater in preparation for, and during demolition and renovations.

## EWA PH II S5.B.6.a.i.(d) Permit excerpts

*Add to the existing list the following provisions*

*Similar to the language in the western WA permits above, the EWA permit language would include a date by which the update would be required.*

(d) Municipal buildings. The O&M Plan shall address, at a minimum:

- Cleaning
- Washing
- Painting
- Other maintenance activities

Permittees shall implement all pollution prevention/good housekeeping practices established in the O&M Plan for buildings owned, operated, or maintained by the Permittee.

Permittees shall address building exterior cleaning and maintenance, including proper management of washdown water from buildings built between 1950-1980 and buildings with PCB-containing materials that will come into contact with washwater.

Permittees shall implement proper handling of building materials and implement other source controls to prevent PCBs from entering stormwater in preparation for, and during demolition and renovations.